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ABSTRACT

Program Methods and Materials for Training Career Educators (Project FOCUS) established and accomplished three major objectives: (1) to identify, select, and provide inservice career awareness staff development training for elementary school teachers; (2) to design, develop, and evaluate a replicable, exportable, and practical staff development Training Manual (CE 022 608) that can be used to train personnel to implement elementary school career education programs; and (3) to research the effectiveness of the career awareness Training Manual and to validate the efficiency of matching teacher variables to training procedures (reported in CE 022 609). Developmental, managerial, and evaluative activities were conducted at Boston (Massachusetts) University, School of Education. Four field-site school systems in eastern Massachusetts were utilized. At these sites, eighty elementary school education personnel received comprehensive career awareness inservice training. This training concentrated on classroom curriculum infusion strategies. The inservice component not only delivered direct services to these educators, but served as the field-test segment for the development of the Training Manual. (This report provides a general description of the developmental and organizational activities which comprised the program effort.) (BM)

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PROJECT FOCUS

Methods and Materials for Training Career Educators

FINAL REPORT

VOLUME I

PROJECT DESCRIPTION

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A Project Funded
by
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Career Education Program
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U S DEPARTMENT OF HEALTH
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I. Program Methods and Materials for Training Career Educators (Project FOCUS): An Overview.

Program Methods and Materials for Training Career Educators (Project FOCUS), was a program funded by the Office of Career Education, U. S. Department of Health, Education and Welfare. This $93,000.00 grant was awarded to the Boston University School of Education under the co-directorship of Harold S. Resnick, Ed.D., Associate Professor of Education in the Department of Business and Career Education, and Robert R. Gower, Ed.D., Associate Professor of Education in the Department of Childhood and Curriculum Education. In recognition of the importance of an early and appropriate introduction to the elements fostered by the career education concept, Project FOCUS concentrated its efforts on the elementary school level. The project established and accomplished three major objectives. These were:

1. To identify, select, and provide career awareness staff development training for eighty (80) inservice elementary school educators.
2. To design, develop, and evaluate a replicable, exportable, and practical staff development Training Manual that may be used for training personnel to implement elementary school career education programs. This manual incorporates a high-structure instructional design and an alternative low-structure design.
3. To research the effectiveness of the career awareness Training Manual and to validate the efficiency of matching teacher variables to training procedures.

With developmental, managerial, and evaluative activities emanating from the Boston University, School of Education, Project FOCUS established outreach into four (4) field-site school systems in eastern Massachusetts. These were: Boston (Massachusetts) Public Schools, District I (an urban setting); Brookline (Massachusetts) Public Schools (an upper middle class/suburban setting); Stoughton (Massachusetts) Public Schools (a lower-middle class/suburban setting); and Barnstable (Massachusetts) Public Schools (a rural setting).

At these sites eighty (80) elementary school education personnel received comprehensive career awareness inservice training. This training was geared to directly applicable classroom/curriculum infusion strategies. The training was led by project funded and trained instructors.

The inservice component of Project FOCUS not only delivered direct services to these educators, but served as the field-test segment of the development of the Training Manual. Formative evaluative feedback was continuously elicited from the inservice participants and from the four field-site instructors. This information was utilized to shape the content of the Training Manual and to test the effectiveness of the high and low-structure presentation formats as matched to the varied needs, background, and orientations of persons receiving instruction.

Project FOCUS operated continuously during the twelve month period beginning September 1, 1978, and concluding on August 31, 1979.

This volume (Volume I) of the final reports of Project FOCUS is the first of three separate documents emanating from the project. Its intent is to present the reader with a general description of the developmental and organizational activities which comprised the program effort. Volume

II is the staff development Training Manual. This is the major resultant product designed for use by professional staff development personnel with pre-service and inservice educational personnel. The third document (Volume III) is titled: Theory and Research: Evaluation Results. It presents a detailed report of the evaluative procedures employed by Project FOCUS, and an analysis of the results of these procedures.

Those who are interested in obtaining Volumes II and III are directed to the final section of this report (Dissemination), which outlines their availability.

II. General Information

A. Origins of the Program

Based on the programmatic assumption that career education should be infused into school programs by professional educators, an investigation was conducted to determine the state of readiness of school based personnel to implement career education programming. A national survey reported that there was a large need for staff development in career education concepts. This same survey also indicated that "the lack of competent persons to train the staff (was) among the most important problem(s) for the implementation of career education." (McLaughlin, 1976.)

An investigation of pre-service education for professional educators showed that, with few exceptions, most teacher education institutions have not made a significant commitment to prepare teachers to infuse career education into their classroom programs.

These investigations revealed several factors related to staff development in the area of career education. The first was the general lack of career education training available to school-based educators. In addition, it was discovered that of the training which did occur, much was done by consultant personnel based outside the target school locale. The result was that little career education training expertise was built which would remain within the school system. A third major finding was that little career education training was being offered to pre-service professional educators.

The net of these findings presented a need for the development of a training program to provide inservice educators with immediately useful competencies for the infusion of career education into their ongoing

curricula. It was determined that such a program should be useable by staff development personnel at the local, state, and university levels, and that it should be presented in a format which could be readily adopted by training personnel with varied levels of familiarity with career education concepts.

Over the course of one calendar year (September, 1978 through August, 1979), Project FOCUS addressed these needs by developing a career education training program for professional educators. This program is competency based utilizing information researched by Harold S. Resnick, Boston University, as a part of a project funded by the Massachusetts State Department of Education. In that project, Dr. Resnick identified and validated the competencies needed needed by school personnel to implement career education. (Resnick, 1977.)

The most practical vehicle for this career education training program was judged to be a training manual useful in either pre-service or inservice settings. It was further decided that to be most effective, this manual should delineate alternative instructional approaches in order to better accommodate differing styles and levels of receptivity of trainees. Therefore, 2 instructional formats were developed: a high-structure approach, and a low-structure approach.

The production of the staff training manual was one major objective of Project FOCUS. Two other objectives held equal importance in its overall scheme. These were the training of eighty professional educators in four school systems, and the testing of the effectiveness of the manual, its alternative instructional approaches, and the efficiency of matching teaching variables to training procedures. A more complete listing of the program objectives is presented below.

PROGRAM OBJECTIVES

FOR GRANT #G0078C0021

PROGRAM METHODS AND MATERIALS FOR TRAINING CAREER EDUCATORS

(Project FOCUS)

1. To identify, select, and provide career awareness staff development training for 80 in-service elementary school educators.

   A. Each teacher will develop a personal philosophy of career awareness and be able to present that position to other educators.

   B. Each teacher will be able to analyze existing career awareness curricula according to specified criteria.

   C. Each teacher will be able to organize and adapt existing career awareness curricula for their respective teaching-learning environments.

   D. Each teacher will be able to develop career awareness curricula, using a group-established process and criteria.

   E. Each teacher will be able to infuse career awareness curricula into their ongoing instructional process, and evaluate its effectiveness.

   F. Each teacher will be able to establish and monitor a classroom management system that optimizes the ability to infuse career awareness into the ongoing instructional process.

2. To design, develop, and evaluate a replicable, exportable, and practical career awareness Training Manual to be used for training personnel to implement elementary school career education programs. The manual will present two instructional approaches; one, a high-structure design, the other a low-structure design.

   A. To design and develop the Training Manual.

   B. To test the effectiveness of the Training Manual with practicing professional educators at non-university field sites.

   C. To modify and disseminate the Training Manual to appropriate educational agencies.

   D. To establish a Career Awareness Resource Center for use in the training program that corresponds to career awareness Training Manual.

3. To research the effectiveness of the career awareness Training Manual, and to validate the efficiency of matching teacher variables to training procedures.

A. To validate procedures for screening teachers according to demographic variables, receptivity to change, and attitudes toward and knowledge of career education.

B. To evaluate the effectiveness of matching teacher variables and curriculum structure to permit an identification of essential predictors and their relative importance in determining curriculum structure for teachers.

C. To evaluate the career awareness competencies of participating teachers.

Project FOCUS concentrated its participant selection and training program efforts at the elementary school level (K-8). This decision was made for two reasons. First, this is the level in which infusion has its strongest thrust and, therefore, seemed the most appropriate place for the assessment of an infusion oriented training program. Secondly, although the needed career education competencies differ somewhat from level to level among educators, the common core skills are relatively constant. It was determined, therefore, that a general control of the grade level of teachers would be the best approach, since several other variables including geographic location, teacher receptivity, and structure of the training program were being modified as variables in the project.

As mentioned above, field sites were selected in which to provide actual career education training to educators while testing the effectiveness of the content and procedures of the training program. Four school systems in eastern Massachusetts participated in the training validation phase of Project FOCUS. These were:

Boston Public Schools, District I
Stoughton Public Schools
Barnstable Public Schools
Brookline Public Schools

These school systems represented a cross-section of urban, suburban, and rural communities. The eighty educators trained were all then employed

at the elementary school level and included classroom teachers, specialists, administrators, and curriculum coordinators.

B. Program Management

Sponsorship for Project FOCUS emanated from the United States Office of Education, Office of Career Education. Mr. Gerald Elbers was the designated project officer. The program was managed by the Boston University School of Education, Boston, Massachusetts, under the co-directorship of Dr. Harold S. Resnick, Associate Professor of Education, Department of Business and Career Education, and Dr. Robert R. Gower, Associate Professor of Education, Department of Childhood and Curriculum Education. Full-time project management was provided by Frank C. Farinella, a senior research associate in the Department of Business and Career Education. These persons formulated the basic management unit for Project FOCUS. Other personnel were involved as required on a part-time, special assignment, or contracted services basis. These include those who provided secretarial/clerical services; research services; printing services; the specific technical services provided by the four field site instructors; and the technical services provided by the evaluation design and data analysis consultants.

The responsibilities and activities of the persons involved in the management of Project FOCUS followed this general structure. The Project Officer assumed a stance which combined equally effective elements of support to the project efforts and accountability review for the sponsoring agency. Doctors' Resnick and Gower, the co-directors, assumed responsibility for the planning, development, and implementation of all aspects of Project FOCUS, from its inception until its conclusion. They also maintained direct communication with the project

officer. The co-directors, in turn, delegated the duties of daily management activities to Mr. Farinella. The project manager coordinated budgetary issues, inter-university communications, and specific activities related to the development of program outcomes.

The Office of the Comptroller, Boston University, maintained the general financial accounts of Project FOCUS. Specific records of all project purchases and expenditures were kept by the project manager. Approval of all budgetary activities rested with the co-directors. Project FOCUS operated within budget for its full term. No categorical adjustments were required. A listing of budget categories and amounts is presented in Appendix A.

C. Program Activities and Outcomes

The three major outcome products of Project FOCUS were: (1) the design, development, and evaluation of the career awareness staff development Training Manual; (2) the provision of career education training to eighty inservice professional personnel; and (3) the research into the effectiveness of the training program presented in the manual specifically including its alternative instructional procedures.

The central activity of the project was the development of the staff training program, and its packaging in the staff Training Manual. Two other outcome activities were directly interrelated to this effort. In addition, several other outcomes resulted. These included the review, purchase, and accumulation of materials to establish a Career Awareness Resource Center in the Boston University School of Education, and dissemination of project initiated concepts and materials, both during the project year and as an ongoing activity after project conclusion.

Although there was an overall chronology to the management of the activities of Project FOCUS, the activities did not occur discretely. The following is a somewhat comprehensive attempt to list the major activities of Project FOCUS matched to the major outcomes of the program.

Major Outcome

The design, development and evaluation of the career awareness staff Training Manual.

Activities

- Research the need for a career awareness training program.
- Determine career education professional educator competencies.
- Research career education staff training programs currently in existence.
- Review, select, and order resource materials for the training program.
- Research the need for provision of alternative instructional presentations to match participant needs.
- (Additional Product.) To establish a Career Awareness Resource Center at Boston University, using materials purchased and gathered for development of, and inclusion in the Training Manual.
- Determine the training program components.
- Determine the training program instructional presentation alternatives: high-structure and low-structure approach.
- Determine the training program topical outline.
- Select and develop the instructional objectives, activities, and instructional resources for the training program.

- Compile, format and print the field test instructional manual.
- Utilize the manual in the field-site instructional phase of the project.
- Systematically collect and review data from field-site instructors while the field-test manual is in use.
- Systematically collect and review data field field-site participants who are involved in the training program introduced by the Training Manual.
- Conduct on-site observations while field-test manual is in use.
- Meet to solicit and collect group-summative review data from the four field-site instructors.
- Compile and analyze all data assessing the effectiveness of the field-test instructional manual.
- Modify the career awareness staff Training Manual based on field-test feedback.
- Print the revised version of the career awareness staff Training Manual.
- (Additional Product.) Develop a brochure to promote the availability of the manual.
- Disseminate the brochure.
- Disseminate the career awareness staff training manual.

Major Outcomes

Provide career education staff development training for eighty in-service elementary school educators.

Activities

- Select field-site training locations.

- Establish training program as an approved four (4) graduate credit course in the Boston University School of Education schedule of courses.
- Determine the criteria for participant selection.
- Promote the field-site training program and select the in-service participants.
    a. Brochures and application forms printed and disseminated.
    b. Applications received and reviewed.
    c. Participants selected, notified, provided with informed consent information, registered for the staff training course.
- Select field-site instructors.
- Train field-site instructors.
- Provide staff development training in four field sites to eighty (80) participants during Semester II, January through May, 1979.

Major Outcome

Research into the effectiveness of the training program presented by the manual specifically including alternative instructional models.

Activities

- Develop and select instrumentation to screen participants according to demographic variables, receptivity to change, and attitudes toward and knowledge of career education.
- Develop instrumentation to provide formative feedback from field-site instructors.
- Develop instrumentation to provide formative feedback from participating inservice educators.

- Develop and implement procedures to monitor field-site instructional sessions.
- Provide meetings involving field-site instructors in formative and summative review of the training program.
- Systematically collect and summarize all formative and summative data.
- Analyze the results.
- Report the results. (See Volume III, Theory and Research: Evaluation Results.

III. The Staff Training Manual: Its Design, Development and Evaluation.

The career awareness Training Manual, a product of Project FOCUS, was developed at Boston University's School of Education during the year September, 1978 through August, 1979. The Manual is designed for use in professional development programs for pre-service and inservice educators. A unique feature of the Manual is the structure of its presentation. Two alternative presentation models are available to staff trainers. One is a high-structure format, the other a low-structure format. This dichotomy of instructional models facilitates the effectiveness of a match of presentation to training participant learning style and receptivity.* The Manual also contains pre-testing instrumentation to determine participant needs, and post-tests to measure cognitive and affective change. The career education training program presented in the Manual was field tested at four community school sites with eighty inservice elementary school personnel. These participants and the four field site instructors provided Project FOCUS development staff with evaluative data designed to test the effectiveness of the training program and the efficiency of matching participant variables to training procedures.

This section will present an overview of the process by which the career awareness Training Manual was designed, developed and evaluated.

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*This notion of matching structure of presentation to participant styles is related to David E. Hunt's concept of Conceptual Level (CL). Hunt hypothesizes that some learners are more dependent on external standards and will profit more from high-structure educational approaches. Other learners have a greater degree of internal standards and will profit more from low-structure educational approaches. (Hunt, 1970.)

The Design of the Training Program

The career education training program developed by Project FOCUS staff is competency based. It is directed toward the immediate implementation of career education infusion activities in school curricula by training program participants. The design of the training program is supported by prior research completed by the Project Co-Directors, Dr. Harold S. Resnick and Dr. Robert R. Gower. Dr. Resnick completed a study funded by the Massachusetts State Department of Education in 1977, which identified the competencies needed by school personnel for the implementation of career education (Resnick, 1977). Dr. Gower has specialized in curriculum design and the investigation of teaching models.

The training program design evolved on a linear basis as illustrated below.

Career education technique competencies	- Philosophy - Curriculum - Methodologies - Management	Focus of Training Sessions	objectives and activities	• high-structure presentation • low-structure presentation

The staff Training Manual was formatted to provide the required materials, directions, resources, and content outline for staff trainers, all within the framework of one comprehensive package.

The components of the Manual include an introductory section introducing the philosophical and theoretical base of the training program and a description of the elemental distinctions between the high-structure and low-structure presentation models (see Appendix B).

Pre/Post-test instruments are included to assess participant cognitive and affective variables relating to career education and to personal learning preferences (Appendix C).

The training program itself is presented in fifteen two-hour sessions (Appendix D). Each session follows a similar outline. A narrative introduction is presented for the trainer. This is followed by a listing of session objectives and presentation of two instructional models matched to a high-structure and a low-structure format. Included in each session are copies of printed resources needed for the presentation and masters from which to produce needed visual transparencies.

The staff Training Manual is surprisingly compact and transportable considering its comprehensive nature. For greater detail the reader is referred to Volume II of this final report: The Training Manual.

Development of the Training Manual

In the early stages of Project FOCUS, the project staff began to research and review in several areas which served as a base for the structure of the staff development program and the Training Manual in which the program is contained. Previously developed training programs from various public and privately funded sources were closely scrutinized. The body of research into required competencies for teaching career education was reviewed. Much of the work related to the presentation of alternative teaching styles and to models of teaching was examined. Several professionals who had been actively involved in career education staff development were interviewed in order to solicit their opinions of the needs which should be answered in a career awareness training program for elementary school personnel and also the features which they felt should receive attention in the development of a Manual for staff trainers.

The general consensus derived from this detailed review, research and planning period was that the training program should be precise in format, and should be directed to topics which would be seen by

professional participants as being realistically relevant and immediately applicable in their work settings. It was determined that the Training Manual should be sirgular in volume, should be usable by persons who have not had a great deal of experience in career education staff development, should provide alternative instructional models for each lesson, should contain all the written resources required for presentation, and should provide overhead transparency masters as required.

Once the format question was answered, several developmental steps followed. These were:

1. Determination of the session topics to include in the program and the proper sequencing of these topics.
2. Development of the content outline for each session topic and an introduction presenting overview instructions for the staff trainer.
3. Development of the instructional objectives for each session.
4. Sequential development of an outline of steps to be followed in presenting each session from two instructional models: (a) a high-structure approach; and (b) a low-structure approach.
5. Developmental research and compilation of instructional resources matched to each session.

Other activities which occurred during this period included:

1. The development of a detailed explanation of the nature and intent of the alternative high and low-structure presentation models. (See Appendix B.)
2. The selection and development of instruments to determine variables which might predict participant instructional preference. (See Appendix C.)

3. The development of pre and post affective and cognitive tests to assess participants knowledge of, and attitude toward career education. (See Appendix C.)

4. The development of monitoring instruments designed to elicit instructor and participant feedback during the field-test period. (See Appendix E.)

These activities were completed by December, 1978. The career awareness Training Manual was then assembled for presentation to the field-site instructors for the field testing period which was scheduled for the second semester (January-May) of the 1978-1979 academic year.

On January 5, 1979, the draft copy of the career awareness Training Manual was presented for the first time to the persons selected to field test the training program at four pre-selected sites. This presentation was made by the project co-directors and by the project manager. An agenda outlining the activities of this trainer's session is included in Appendix F.

Testing of the Training Manual/the Provision of Training to Eighty Professional Educators

During the second semester of the academic year 1978-1979 (January - May, 1979), the concentration of activities for Project FOCUS was at community based sites in Massachusetts. Four pre-selected, cooperating school systems made classroom facilities available to the Project. In return for this cooperation, inservice elementary school personnel from each of the school systems were given first selection priority for twenty tuition paid positions at each site in the four credit graduate course approved by the Boston University School of Education which field tested the career awareness training program and the staff Training Manual.

The four cooperating school districts were selected to represent a broad socio-economic cross-section. They included: Boston (Massachusetts) Public Schools (urban); Brookline (Massachusetts) Public Schools (upper middle class/suburban); Stoughton (Massachusetts) Public Schools (lower middle class/suburban), and Barnstable (Massachusetts) Public Schools (rural).

Early in the project year (September, 1978) after the finalization of cooperative arrangements with the cooperating communities, four field-site instructors were selected and received approval from Boston University to instruct during the second academic semester.

The next steps for Project FOCUS personnel were to:

1. Gain formal approval for the four credit graduate course. (The course was officially designated: BC 701X Career Education Implementation and Practice.)
2. Develop, print, and distribute a flyer with an application form to all elementary school personnel in the four communities. (See Appendix G.)
3. Establish applicant review criteria and select participants for each site.
4. Notify accepted participants and obtain written consent forms for use of experimental data (Appendix H).
5. Send letters of regret to participants not selected (Appendix H).
6. Officially register selected participants for the approved four credit course.

A local representative was designated in each of the four communities. Project FOCUS personnel coordinated participant selection decisions with

this person in each case. The maximum number of fundable participants was eighty. Field test and research considerations required that the number at each site be approximately twenty participants. This number would facilitate an evaluation of the effectiveness of the alternative high and low-structure presentation models matched to participant variables. The field site course was scheduled to be taught one night per week with two two-hour sections per night.

The nature of response was such that all applicants who applied could be accommodated at the Stoughton and Barnstable sites, and some of the numerous (over thirty) applicants from the Boston Public Schools could be accommodated at the nearby Brookline site. The actual specification of the assignment of the participants at the four sites is presented below:

	Boston	Brookline	Stoughton	Barnstable
High-Structure Presentation 4 to 6 P.M.	12	10	11	9
Low-Structure Presentation 7 to 9 P.M.	11	8	11	8

Number of Participants

Participants were given a choice of time session. Where no preference was indicated, assignment was randomly determined by Project FOCUS staff. The participants had no prior knowledge that the sessions would be taught in differing presentation formats. The aim of project staff was to accommodate personal time preferences and provide for heterogeneity of participants in each session (based on variables which may

predict instructional preferences). No pre-testing of participants was conducted until the first class session, after site and session assignments were firmly established.

For sixteen academic weeks of the second semester (1978-1979), the Training Manual was field-tested at the four sites by the instructors with the eighty participants.

Evaluative requirements and intrusions were minimal for the participants and instructors, but these were consistently applied and kept Project FOCUS staff at Boston University well apprised of the state of developmental affairs.

The course met one night each week (Wednesday) for two sessions (4 to 6 P.M. and 7 to 9 P.M.). The participants were assigned to small groups and consistently attended the same session each week. The instructors utilized the course outline and materials provided in the draft form Training Manual. They followed the prescribed 15 lesson course outline. Each week they would teach the same content outline to both groups with whom they met. But the instructors consistently utilized a different presentation model for each session. The first session (4 to 6 P.M.) was taught with a high-structure format; the second session (7 to 9 P.M.) with a low-structure format.

The first week of the training period was utilized to officially register all participants in the Boston University School of Education and to pre-test all participants. The pre-test instruments were designed to: (1) measure participant variables believed to be predictive of instructional presentation preference, and (2) determine affective and cognitive variables related to career education. (See Appendix C,

for instrumentation). Thereafter, no classroom time was taken for further testing or data collection. At the conclusion of each instructional session, participants were requested to complete a very short session reaction form. Instructors were required to complete two reaction forms: one was specific to the subject matter and instructional format of the lesson presented that evening, the other was generic to the session and the participant's reaction to it. (See Appendix E.) This data was received, reviewed, and coded weekly at Boston University by Project FOCUS staff.

In addition to the specific evaluative data collected weekly, Project FOCUS staff monitored the field-sites with on-site observations and weekly discussions with the instructors.

Attendance and Progress of the Field-Site Participants

Eighty (80) inservice elementary school personnel were selected to participate in the fifteen session field-test at four sites. These eighty persons were chosen from a group of applicants which exceeded 100 in number. Of the selected group, seventy-five participants completed the program. This percentage (94%) of participant completion is high. The five participants who left the program each expressed personal reasons unrelated to the program.

Throughout the course of the program, participant attendance was consistently high at each of the four sites.

A unique measure was administered to each participant at the conclusion of each instructional session. This device (see Appendix E) elicited a self-rating of participant involvement (I) and satisfaction (S). This data served as a measure of session effectiveness. Comparisons were later made among groups, high and low-structure presentations,

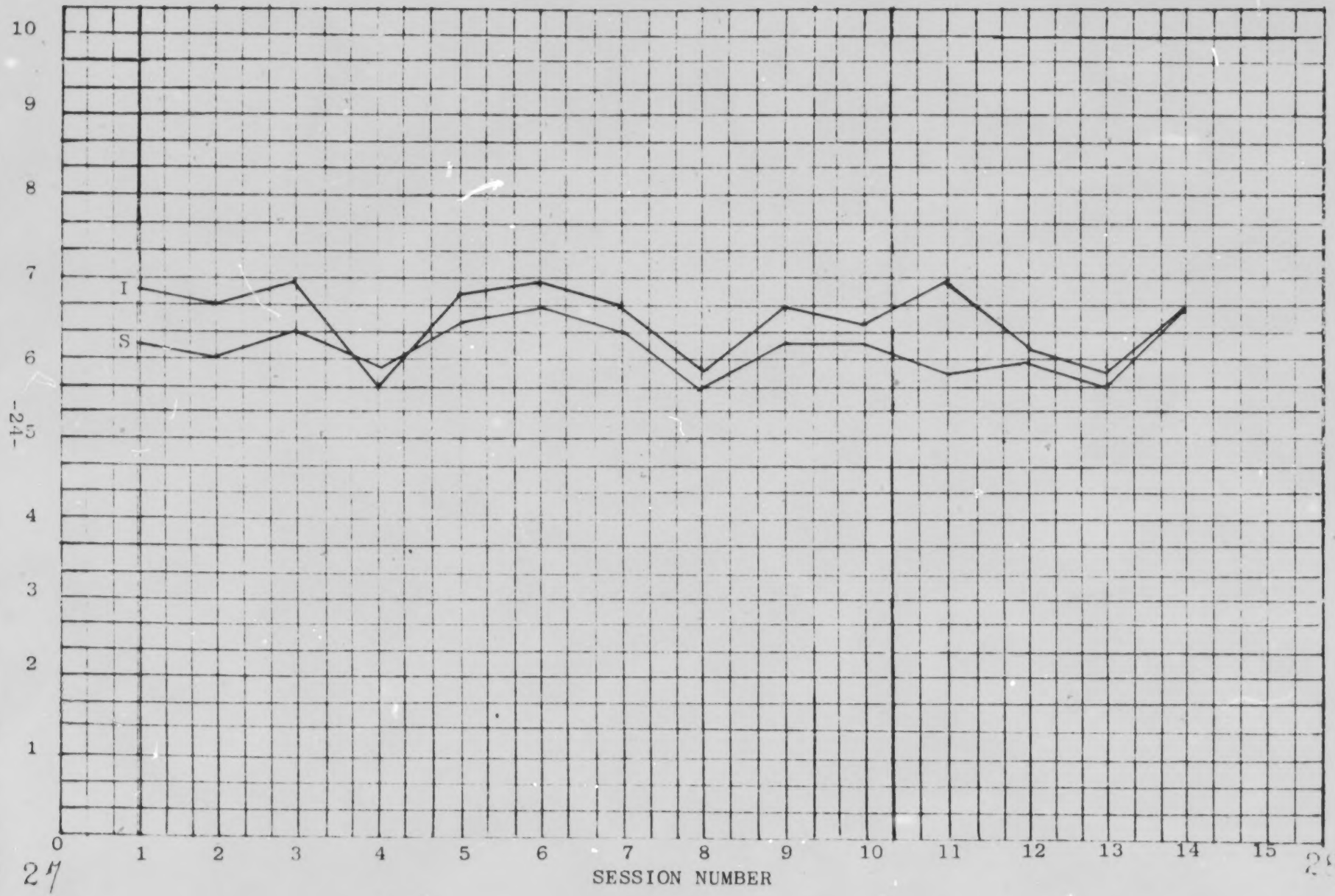
Figure 1. All Participants
Student Reactions

SESSION	N	MEAN I	MEAN S	QUADRANT
				(Mean scores in excess of 5.00 place in quadrant IV of a 4-quadrant matrix)
I	66	6.75	6.21	IV
II	70	6.64	6.06	IV
III	62	6.84	6.34	IV
IV	61	5.68	5.78	IV
V	63	6.74	6.41	IV
VI	57	6.82	6.51	IV
VII	59	6.65	6.39	IV
VIII	49	5.79	5.64	IV
IX	53	6.57	6.18	IV
X	51	6.46	6.19	IV
XI	56	6.90	5.79	IV
XII	52	6.12	5.91	IV
XIII	54	5.82	5.66	IV
XIV	52	6.54	6.56	IV
Mean	57.5	6.45	6.12	IV
S.D.	6.22	0.42	0.31	

reactions to session topics, etc. For an in-depth presentation of these and other evaluative data, concerning participant reaction to the program, the reader is directed to Volume III of the Final Report, Theory and Research: Evaluation Results. Figures 1 and 2 show an overall view of the measure of involvement and satisfaction of program participants across all the instructional sessions.

Figure 2. MEAN SCORES
STUDENT REACTIONS
INVOLVEMENT AND SATISFACTION PER SESSION
ALL PARTICIPANTS

KEY
I: INVOLVEMENT
S: SATISFACTION



The Revision of the Staff Training Manual

As discussed in the previous section, evaluative information was gathered from the participants and instructors relative to the effectiveness of each instructional session of the training program. Instructors completed a form which gathered uniformly consistent information concerning the general effectiveness of each session. In addition, reaction forms which were specific to the goals, objectives, and instructional procedures of each session were also completed by each instructor (see Appendix E). Participant reaction (mentioned above) was elicited and matched to each session. Project FOCUS staff monitored the field-test instructional sessions in person, and also regularly discussed progress with the instructors. All of this evaluative data was collected, formatted and recorded.

At the conclusion of the field test period, a post-program feedback session was convened. The purpose of this full day session was to gather together the Project FOCUS staff and the four field site instructors to review, clarify, and interpret the aggregate information collected relative to training program and manual effectiveness. This session was attended by the two program co-directors, the program manager, the data collection and analysis staff, and the four field site instructors.

The major questions addressed were directly related to the issue of revision of the staff Training Manual into a finalized format. Format, sequence, scope, instructional outline, instructional resources, transparencies masters, directions for instructors and participants were among the many issues raised and discussed in this meeting. The results of this session and an analysis of formative feedback data gave clear indications of both the strengths of the Training Manual and the portions

which required modification and restructure.

The overall structure and outline of the Training Manual was maintained. There were no major revisions. Some editing, consolidation, and clarification of instructions were required. An introductory chapter was added to present the user with an overview of career education, and of the training program itself. The audiotapes which had served as directional aids to the field test instructors were transcribed, edited, and included as introductory sections for each instructional session. Some resource materials were deleted and others restructured in accordance with the recommendations of the field-site instructors.

The revised Training Manual was printed on three-hold punched paper for easy insertion into a three ring binder. Pre/post-test instrumentation; instructional session introductions, outlines, and resource materials, and the introductory and concluding chapters are all contained in the finalized volume.

IV. Program Evaluation: Formative and Summative Measures of Effectiveness

Volume III of this final report, Theory and Research: Evaluation Results, presents a comprehensive treatment of design, processes and results of the extensive evaluation effort which served as a major component of Project FOCUS. The following section of this document is intended to give the reader an overview of that evaluation effort, and a review of the major conclusions.

In its simplest form Project FOCUS began as an inquiry into inservice career education for teachers. The goal was to better understand the relationship between teacher learning characteristics, instructional approaches, and behavioral outcomes. The theory, too, was relatively simple: effective career education for teachers includes both cognitive and affective outcomes, and the ways to achieve those outcomes is to coordinate personality variables with environmental variables. The matching of these two types of variables results in higher scores.

Evaluation Components and Instruments

There were three major components to the evaluation of this project and of the Training Manual. The first of these was a measure of the effectiveness of the staff development program. To accomplish this, a pre/post-test design was developed. These tests included both a cognitive instrument to measure the knowledge of the participants before and after the training program; as well as an affective instrument to measure changes in attitudes toward career education before and after the program. Both of these instruments are included in Appendix C of this report.

The second major component of the evaluation assessed the satisfaction and involvement of the participants while the individual sessions

were being conducted. This was a formative assessment, and was used to modify the program and increase its viability for the participants. It also provided immediate instructor feedback regarding the reactions of the participants to each training session. The form for this process, called the "Session Reaction Form," consisted of 38 descriptive adjectives. Each adjective scaled from 1 to 10, provided a rating of the level of satisfaction and involvement for the participants (see Appendix E). In using this form, the scores for each word were tabulated, and means established for each session. The instructional session was considered well received if the involvement and satisfaction scores fell in the fourth quadrant of a ten by ten matrix. That is, if the average for both involvement and satisfaction was five or above. Scores that fell below this number in either category were taken as a signal that the training program was in need of review and some intervention was called for. As such, this sensitive instrument provided essential feedback for the Project FOCUS monitoring team and for the field-site instructors.

The third component of the evaluation was also designed for the program monitoring team, and provided feedback from the instructor regarding the program while it was being conducted. As such, this was another formative process. There were two types of instruments for this process (Appendix E). The first was a generic "Instructor Assessment Form." This form provided feedback regarding the success of each session as perceived by the field-site instructors. It was completed after each instructional session and sent to the monitoring team for review. It, too served as an immediate signal that particular modifications or intervention strategies may be needed. The second set of forms were specifically modeled to each of the training sessions. These were designed

to assess the "fidelity" of the program. That is, by responding to these forms, the instructor provided information regarding the extent to which the program was being implemented, according to the Training Manual. This too served as a valuable tool to monitor the "quality control" of the training program.

An extensive data collection, coding and analysis effort began in January, 1979 along with the implementation of the field-site training program. Formative and summative evaluation processes provided information which was essential for measuring the effectiveness of the Training Manual for the participants and the four instructors. This data was utilized in structuring the final form of the Training Manual. A summary of the conclusions of the evaluation component of Project FOCUS follows.

Conclusions of the Evalution Effort

1. The Project proved to be an effective vehicle for increasing educators' knowledge of and attitudes toward infusing career education into the school curriculum. Significant differences were found in both of these domains as a result of participating in the training program.

2. The Project provides evidence that the training program is a functional tool for staff development. That is, it can be used by instructors to effect the cognitive and affective changes described in the previous conclusion.

3. The Project is suitable for use as a staff development program. That is, the four instructors in the pilot test used approximately 85% of the program, which both maintained program integrity and allowed for individual and situational differences among the instructors and the individual needs of participants.

4. Educators enjoyed participating in the program. That is, the research provides evidence that they were both involved in the instructional process, and satisfied with that process during implementation. Formative evaluation data revealed that the participants engaged the instructional content and worked diligently toward achieving the objectives of the program.

5. The staff development Training Manual included two instructional styles: high and low-structure. Both the high and low-structure treatments were effective tools for achieving the cognitive and affective outcomes of the Project. That is, an instructor may use either treatment with a level of confidence that it will work with the program participants.

6. Teachers (program participants) can be divided into separate groups, based on their receptivity toward change and innovation. This is an effective decision-making criterion for assigning treatment (high and low-structure) to groups of participants.

7. It is better to match high receptive participants with a low-structure program and vice versa. When program participants are matched (high or low receptive) to training treatments (high or low-structure) their variability of involvement and satisfaction will decrease and they will tend to score higher on involvement and satisfaction scales.

8. When teacher receptivity and training treatments are matched (low receptive to high-structure and vice versa) participants show greater increases in their attitudes toward career education.

9. Project FOCUS is an effective program for training individuals for the implementation of career education. The program provides alternative training approaches that can be matched to both the orientation of the instructor and the learning styles of participants.

V. Dissemination of the Products of Project Focus

One of the contracted objectives of Program Methods and Materials for Training Career Educators (Project FOCUS) was to disseminate the findings and products of the project both locally and nationally. This dissemination process had two phases: formative and summative.

The formative dissemination process included a professional sharing of concepts and concerns with others in the field of education and professional training. This sharing was accomplished by the project co-directors, Doctors' Resnick and Gower during the project year. Both men traveled to several professional conferences where they made formal presentations related to the objectives, development, and future results of the training program development project. A listing of the locations and dates of these trips and presentations follows:

Dr. Harold S. Resnick
Dr. Robert R. Gower
October, 1978
Attended U.S.O.E./Office of Career Education PRoject Director's Meeting
Washington, D. C.

Dr. Harold S. Resnick
December, 1978
Convention of the American Vocational Association
Dallas, Texas

Dr. Harold S. Resnick
Dr. Robert R. Gower
February, 1979
Convention of the Eastern Educational Research Associates
Kiawah Island, South Carolina

Dr. Robert R. Gower
April, 1979
Convention of the American Educational Research Association
San Francisco, California

Dr. Harold S. Resnick
April, 1979
Convention of the National Association of Industry-Education Cooperation
Kentucky

The final reports of Project FOCUS were developed in three separate volumes. These volumes are:

- Volume I - Project Description - A document which presents an overview of the development and organizational activities of Project FOCUS.
- Volume II - The Training Manual - The twelve chapter volume which presents the complete career awareness training program including introductory remarks, fifteen instructional sessions, pre/post-test instrumentation, and instructional resources.
- Volume III - Theory and Research: Evaluation Results - This volume presents a detailed description of the formative and summative research components of Project FOCUS. Data collection and analysis procedures are thoroughly reviewed and the research conclusions are presented.

The second phase of the dissemination process involved the distribution of one hundred and fifty (150) sets of the three volume final report. These volumes were distributed throughout the nation to key personnel in the field of educational planning, coordination and personnel preparation. Recipients of the three volume set included the fifty state career education coordinators; selected career education project directors throughout the nation, and nationally recognized educators concerned with the preparation of educational personnel and with curriculum development.

In addition, over one thousand (1000) descriptive brochures were developed. These brochures described Project FOCUS and its resultant three volume final report(s). An order form was included with which interested persons could order each or all of the volumes on a "cost of reproduction and handling" basis. (See Appendix I for the brochure.)

These brochures were widely disseminated through a nationally developed mailing list. Persons and organizations concerned with educational curriculum planning, program development, and teacher preparation were included on the brochure mailing list.

The products developed through Project FOCUS portent to have continued usefulness for the field of education. They will remain in the public domain and accessible to those who want to put them to use.

REFERENCES

Hunt, David E. "A conceptual level matching model for coordinating learner characteristics with educational approaches." Interchange: A Journal of Educational Studies, Volume 1, No. 2 (1970), 4.

McLaughlin, D. H. Career education in the public schools 1974-75: a national survey. Palo Alto, CA: American Institute for Research, 1976.

Resnick, Harold S. Validation of the competencies needed by school personnel to implement career education. Boston, MA: The Massachusetts State Department of Education, 1977.

APPENDIX A

FINANCIAL OVERVIEW: BUDGET CATEGORIES AND AMOUNTS

FINANCIAL OVERVIEW: BUDGET CATEGORIES AND AMOUNTS

Salaries and Wages	$40,023.00
Fringe Benefits	7,012.00
Evaluation	12,200.00
Consultants	1,000.00
Curriculum Laboratory (Materials)	2,500.00
Domestic Travel	2,000.00
Printing/Duplication	2,000.00
Telephone	600.00
Postage	200.00
Supplies and Materials (Office)	355.00
TOTAL DIRECT COSTS	$67,890.00
INDIRECT COSTS	$25,110.00
TOTAL AWARD	$93,000.00

OTHER:

Tuition Remission (Cost Share, Boston University)	$16,000.00
Instructional Fees (Boston University)	$ 4,000.00

APPENDIX B

THE NATURE OF LOW AND HIGH-STRUCTURE TEACHING MODELS

THE NATURE OF LOW AND HIGH-STRUCTURE TEACHING MODELS

	Low-Structure	High-Structure
Imposed Structure in Establishing Learning Activities (Source of Activity)	Learner makes major contribution in planning activity and accepting responsibility for performance	Teacher designs and presents activity to learner and establishes performance standards
Interpersonal Complexity	Learners interact in groups - with each other	Learner works alone or interacts only with teacher
Resources	Learners get their own resources or generate their own data	Teacher provides all needed resources
Source of Content	Content comes from the learner - experiences group discussion, etc.	Content is provided by the teacher and presented to the learner
Time	Flexible, open-ended, determined by the objective	Restricted and defined
Information Complexity	Multiple sources of information available to the learner	One source of information - teacher or text

	LOW-STRUCTURE	HIGH-STRUCTURE
Level of Abstraction	Abstract - Conceptual - Theoretical - Symbolic - "If-then"	Highly concrete and factual
Evaluation	Learner contributes in designing and conducting self-evaluation	Instruments designed and procedures designed by teacher
Objectives	Objectives determined as a result of analyzing students needs	Teacher establishes objectives based on approved text and materials

APPENDIX C

COGNITIVE AND AFFECTIVE PRE/POST-TESTS

THE COGNITIVE PRE/POST-TEST

Code Identification Number: _____

Location (Circle): Barnstable Boston Brookline Stoughton

Section Time (Circle): 4:00 to 6:00 P.M. 7:00 to 9:00 P.M.

Directions

Read each of the questions contained in this test and mark the answer which is most appropriate.

Mark your answers in the spaces provided for each question.

1. Which of the following is not an appropriate outcome of an individual career infusion activity?

___ a. reinforcement of the academic subject.
___ b. increased student self-awareness.
___ c. acquisition of a saleable skill.
___ d. occupational awareness.
___ e. development of one of the elements of career education.

2. The best way to teach career education at the elementary school level is:

___ a. infusion into existing curricula.
___ b. a separate block of time each week, taught by the classroom teacher.
___ c. a separate block of time each week, taught by a career education specialist.
___ d. a separate course - like art or gym.
___ e. field trips to local places of employment.

3. Long term funding for career education should come from:

___ a. a budget item in the local school budget.
___ b. a budget item in the state funds for education.
___ c. a budget item in federal funds for education.
___ d. a reallocation of resources in the existing school budget.
___ e. vocational education funds.

4. Career education is an educational movement designed primarily to serve:

___ a. potential dropouts.
___ b. all students.
___ c. students going into vocational programs.
___ d. students going into technical careers.
___ e. students going to college.

5. _____ is a conscious effort, aimed at producing benefits for oneself and/or for oneself and others.

___ a. career education.
___ b. work.
___ c. leisure.
___ d. volunteer activity.
___ e. counseling.

6. _____ is the totality of experiences through which one learns about and prepares to engage in work as part of his/her way of living.

___ a. career education.
___ b. work.
___ c. leisure.
___ d. volunteer activity.
___ e. counseling.

7. Unemployment for _____ is three times the national unemployment rate.

___ a. black Americans.
___ b. females.
___ c. minorities in general.
___ d. high school dropouts.
___ e. youth between 18 and 25.

8. Communicating, problem-solving, planning, and decision-making are examples of:

___ a. coping behaviors.
___ b. counseling strategies.
___ c. transferable skills.
___ d. elements of career education.
___ e. elements of career development.

9. The Dictionary of Occupational Titles (D.O.T.) classifies its job analyses into:

___ a. data, people, things.
___ b. data, things, situations.
___ c. occupational clusters, people, data.
___ d. people, things, level of abstraction.
___ e. level of abstraction, things, occupational cluster.

10. Which of the following is <u>not</u> part of a comprehensive career education program?

___ a. career awareness.
___ b. career exploration.
___ c. career analysis.
___ d. career preparation.
___ e. career development counseling.

11. Which is the least desirable approach for a career awareness program?

___ a. interest centers.
___ b. separate program.
___ c. infusion.
___ d. units of instruction.
___ e. separate course.

12. - 21. Match each of the following activities (12-21) to the career education element it would best achieve. Note: An element may be used more than once.

a. self awareness.
b. career awareness.
c. appreciations and attitudes.
d. educational awareness.
e. economic awareness.
f. decision-making skills.
g. skill awareness and beginning competence.
h. employability skills.

___ 12. Decision-making through role playing.

___ 13. Values clarification related to work values.

___ 14. Occupational information game.

___ 15. Review of college catalogs to find specific programs.

___ 16. Interviewing people at their place of work.

___ 17. Establishing and running a company in your classroom.

___ 18. Building a section of a house in industrial arts.

___ 19. Studying the career of your favorite musician.

___ 20. Keeping a personal daily log of your activities, likes and dislikes.

___ 21. Learning how to repair automobiles.

22. Which of the following is not characteristic of Super's theory of vocational development?

___ a. vocational development is the process of matching people to jobs.
___ b. people differ in abilities, interests, and personalities.
___ c. individuals are qualified for a number of occupations.
___ d. vocational development is comprised of a series of life stages.
___ e. vocational development is the implementation of a self concept.

23. Which of the following is not an occupational cluster?

___ a. manufacturing.
___ b. business and office.
___ c. personal services.
___ d. education.
___ e. construction.

24. In matching the school curriculum to the elements of career education:

___ a. each element should be matched to one subject area.
___ b. all elements should be matched to every subject area.
___ c. some career education should be infused at least once each day.
___ d. the natural flow of curriculum to elements should serve as the guideline.
___ e. a separate career education curriculum should be "overlaid" onto the school program.

25. Which of the following is not a guideline for developing career awareness infusion activities?

___ a. at least two career education elements should be developed in the activity.
___ b. information about at least one job or occupation should be included in each activity.
___ c. the activity should be a natural outgrowth of the unit under study.
___ d. the activity should include the materials needed for its successful implementation.
___ e. the activity should be developed from at least one objective in the ongoing curriculum.

26. Which of the following would not be an appropriate career awareness infusion activity?

___ a. a two-week unit on measurement in the math curriculum.
___ b. occupational crossword puzzles.
___ c. a six-week study of colleges offering specific programs of interest to the students.
___ d. a personal journal of likes and dislikes kept as part of the language arts program.
___ e. reading a book and writing a report about the career of a favorite personal hero.

27. A career awareness infusion activity should include all of the following except:

___ a. a mandatory field trip component.
___ b. a clearly stated objective.
___ c. a representation of at least two elements of career education.
___ d. a clear relationship to the ongoing educational program.
___ e. a student-centered activity.

28. Which of the following is not a phase of the role playing process?

___ a. warm up the group.
___ b. set the stage.
___ c. enact the role play.
___ d. evaluate the experience.
___ e. debrief the participants.

29. Which of the following is not a legitimate reason for conducting a role playing activity for career awareness?

___ a. provide relevant occupational information in a setting that approximates reality.
___ b. provide successful experience for the imaginative but academically poor student.
___ c. provide vicarious learning through audience observation.
___ d. develop social skills through direct participation and observation.
___ e. identify several solutions to a problem-solving situation through re-enactments with different players.

30. Role playing in career awareness:

___ a. is the best way to transmit values about work.
___ b. provides an opportunity to personalize work roles and work situations.
___ c. is a good source of occupational information.
___ d. should be developed for all the career education elements.
___ e. should not be used because of its inefficiency and variability.

31. Which of the following is not true of career awareness activity centers?

___ a. encourage student self-learning.
___ b. may be set up as supplemental to the ongoing curriculum.
___ c. encourage flexible use of time.
___ d. require careful teacher monitoring while in use.
___ e. require careful teacher design and structuring in their development.

32. Which of the following is not a characteristic of a career awareness activity center?

___ a. provides for the use of a wide variety of materials, activities, and concepts.
___ b. increases the visual stimulation and excitement of a classroom.
___ c. increases the flow of students through various activities in the classroom.
___ d. increases the structure of the classroom setting for the students.
___ e. can be established in many different environmental settings.

33. Which of the following is the best organizer for career awareness activity centers?

___ a. curriculum content/skills.
___ b. career education elements.
___ c. career exploration experiences.
___ d. transferable skills.
___ e. all of the above.

34. Which of the following is an inappropriate guideline for developing activity centers?

___ a. all student activities should be carefully controlled and monitored through the instructions.
___ b. all student activities should be derived from one or more educational objectives.
___ c. all student activities should be introduced to the learner prior to independent study with them.
___ d. all student activities should be monitored through a student self evaluation and record-keeping system.
___ e. all student activities should utilize multiple kinds of processes to accommodate differences in individual learning styles.

35. - 41. In questions 35 to 41 match the best community resource from the list, for each of the following career education objectives:

___ 35. Helping to establish career education policy.
___ 36. Identifying sites for field trips.
___ 37. Provide students with initial exploratory experiences.
___ 38. Provide accurate job-specific information to students.

a. parent volunteers.
b. Chamber of Commerce.
c. Urban League.
d. advisory committee.
e. internships.
f. shadowing programs.
g. Information Resource Center.
h. guest speakers.
i. career mini-course.

___ 39. Provide in-depth career exploration for students.

___ 40. Provide fiscal resources to support career education activities.

___ 41. Provide classroom support for career awareness infusion activities.

42. Which of the following is <u>not</u> true of a career awareness instructional unit?

___ a. addresses a broad concept or theme.
___ b. is keyed to one career education element.
___ c. runs usually from 2 - 6 weeks.
___ d. contains a number of activities.
___ e. has a major culminating experience.

43. Every career awareness instructional unit should accomplish goals related to:

___ a. the subject area and career education.
___ b. the subject area and occupational information.
___ c. occupational information and career education.
___ d. personal development and the subject area.
___ e. all of the above.

44. Each lesson or activity within a career awareness unit of instruction should contain:

___ a. clearly defined objective.
___ b. relationship to at least two elements of career education.
___ c. experiential activities.
___ d. an evaluation component.
___ e. all of the above.

45. In reviewing career education materials, which criteria <u>must</u> be included in the review?

___ a. objectives, activities, resources.
___ b. resources, activities, evaluation.
___ c. objectives, activities, packaging.
___ d. packaging, resources, evaluation.
___ e. objectives, activities, evaluation.

46. In linking a career awareness activity to its broader curricular perspective, which of the following possible linkages would <u>not</u> be appropriate?

___ a. subject area.
___ b. career education element.
___ c. ease of administration.
___ d. occupational cluster.
___ e. none of the above.

47. - 50. Match the appropriate level of responsibility to the person for implementing a comprehensive career education program.

___	47.	Superintendent.	a. policy making.
			b. budget control.
___	48.	Principal.	c. planning.
			d. facilitating.
___	49.	Teacher.	e. communicating.
			f. quality assurance.
___	50.	Community/parents.	g. implementing.

THE AFFECTIVE INSTRUMENT

QUESTIONNAIRE

The following questionnaire asks you to answer questions about your personal background, teaching experiences and attitudes. This information is important to know so that we may explain your success in the graduate course on career awareness in the elementary school. Please take time to read each question carefully and fill out all information requested.

Thank you for your cooperation.

I. 1. I am an elementary school teacher in the following school system.

_____ 1. Boston
_____ 2. Brookline
_____ 3. Barnstable
_____ 4. Stoughton
_____ 5. Other

2. My age is

_____ 1. 20 - 29 yrs.
_____ 2. 30 - 39 yrs.
_____ 3. 40 - 49 yrs.
_____ 4. 50 - 59 yrs.
_____ 5. 60 and above

3. I am a

_____ 1. Female
_____ 2. Male

4. My marital status is

_____ 1. Single
_____ 2. Married
_____ 3. Separated/Divorced
_____ 4. Widowed

5. My family income is

_____ 1. Below $10,000
_____ 2. $10,000 - $15,000
_____ 3. $16,000 - $20,000
_____ 4. $20,000 - $25,000
_____ 5. Above $25,000

6. I have been a member of the education profession for

_____ 1. less than three years.
_____ 2. three to five years.
_____ 3. six to ten years.
_____ 4. eleven to fifteen years.
_____ 5. more than fifteen years.

7. My highest level of educational attainment is

_____ 1. Bachelors degree in education.
_____ 2. Bachelors degree in a field other than education.
_____ 3. Masters Degree
_____ 4. Masters +30 or Certificate of Advanced Study.
_____ 5. Doctorate.

8. I received my highest degree

_____ 1. less than three years ago.
_____ 2. three to five years ago.
_____ 3. six to ten years ago.
_____ 4. eleven to fifteen years ago.
_____ 5. more than fifteen years ago.

9. I most recently obtained additional credit hours

_____ 1. less than three years ago.
_____ 2. three to five years ago.
_____ 3. six to ten years ago.
_____ 4. eleven to fifteen years ago.
_____ 5. more than fifteen years ago.

10. How many professional organizations do you belong to (IF NONE, PLEASE LEAVE BLANK)

_____ 1. one
_____ 2. two
_____ 3. three
_____ 4. four
_____ 5. five or more

11. Please describe your general level of organizational activity in these organizations (IF NO ORGANIZATIONS, PLEASE LEAVE THIS QUESTION BLANK)

_____ 1. Much Involvement
_____ 2. Some Involvement
_____ 3. Little Involvement
_____ 4. No Involvement

12. How many hours per week do you regularly read educational journals, newsletters related to your teaching?

_____ 1. less than one hour per week.
_____ 2. one to three hours per week.
_____ 3. three to five hours per week.
_____ 4. more than five hours per week.

13. I teach the following subject areas (IF NONE OF THESE APPLY, LEAVE BLANK)

_____ 1. All elementary subjects.
_____ 2. Math and Science only.
_____ 3. Language Arts and Social Studies only.
_____ 4. Art/Music.
_____ 5. Reading only.

The following is a list of curriculum approaches. Please indicate whether these approaches are present in your elementary school.

	INNOVATION		
14.	Team teaching	1. Yes	2. No
15.	Teacher aides	1. Yes	2. No
16.	Value Clarification	1. Yes	2. No
17.	Sex education and family living	1. Yes	2. No
18.	Resource Rooms	1. Yes	2. No
19.	Learning Centers or Stations	1. Yes	2. No
20.	Multimedia Centers	1. Yes	2. No
21.	Multimedia Curriculum Packets	1. Yes	2. No
22.	Drug Abuse Education	1. Yes	2. No
23.	Individualized Instruction	1. Yes	2. No
24.	Micro Teaching	1. Yes	2. No
25.	Interaction Analysis	1. Yes	2. No
26.	Computer-Assisted Instruction	1. Yes	2. No
27.	Middle School	1. Yes	2. No
28.	Differentiated Staffing	1. Yes	2. No
29.	Bilingual Education	1. Yes	2. No
30.	Adaptive Physical Education	1. Yes	2. No

31.	Community School (all ages)	1.	Yes	2.	No
32.	Out-door Education Program	1.	Yes	2.	No
33.	Non-graded Classes	1.	Yes	2.	No
34.	Performance Contracting	1.	Yes	2.	No
35.	Game Simulation	1.	Yes	2.	No
36.	Career Education Materials	1.	Yes	2.	No
37.	Multi-age Grouping for tutoring learning experiences	1.	Yes	2.	No
38.	Inquiry Learning	1.	Yes	2.	No
39.	Environmental Education and Ecology	1.	Yes	2.	No
40.	Alcohol Education	1.	Yes	2.	No

II. The following statements describe classroom situations. Please indicate the appropriate response number which best describes your classroom.

Response Categories:

1. Never
2. Seldom
3. Occasionally
4. Frequently
5. Always

_____ 41. Students can talk to each other while they work.

_____ 42. Students cannot move about the room without asking my permission.

_____ 43. All students work at the same lesson going on in front of the room.

_____ 44. I give my students several assignments and they choose the one they want to work on.

_____ 45. I plan how my students will spend a day at school.

_____ 46. Several small groups of students work at different tasks in several parts of the room.

_____ 47. I postpone planned activities in order to do something more pertinent.

_____ 48. I plan teaching activities with my colleagues.

_____ 49. I call parents on the telephone to report the progress of their child.

_____ 50. I lecture to my students.

_____ 51. I share teaching information and materials with my colleagues.

_____ 52. If a student finishes before others are done, he/she can start a new lesson without waiting for the others to complete the assignments.

_____ 53. Every student gets a copy of the same book to work from.

_____ 54. I inquire into new teaching methods and materials.

_____ 55. I adhere to my lesson plans.

_____ 56. I invite parents to visit the classroom at their leisure.

_____ 57. Textbooks are my primary teaching material.

_____ 58. I use inductive or inquiry teaching methods.

_____ 59. Students may ask other students for help.

_____ 60. I use many different types of materials besides the textbook.

_____ 61. In my classroom, I arrange the desks in rows.

EVALUATION PREFERENCES

The following statements refer to various ways you may prefer to have your teaching performance or graduate course work evaluated. Choose one of the two alternative responses. Please do not leave any items blank.

A. Teaching Performance

62. (1) I would like to be evaluated only by my teaching colleagues.

(2) I would like to be evaluated only by the school administration.

63. (1) I would like the evaluator to tell me what's right or wrong about my teaching.

(2) I would like the evaluator to discuss with me the ways I am performing and doing things in the classroom.

64. (1) I would like to receive a grade from my evaluator.

(2) I would like to grade myself on my teaching performance.

65. (1) I evaluate my teaching by the criteria I establish and I feel are important.

(2) I evaluate my teaching by the criteria the administration establishes.

66. (1) Teaching evaluations should be objective and absolute.

(2) Teaching evaluations should be subjective and relative.

67. (1) I would prefer to receive a report of my teaching evaluation in the form of a personal letter or conference.

(2) I would prefer to receive a report of my teaching evaluation in the form of a report card or objective, standardized form letter.

68. (1) When I am evaluated, I would like the evaluator to tell me what he/she thinks immediately.

(2) When I am evaluated, I would not care when the evaluator issues his/her report.

69. (1) I evaluate my teaching by what other teachers and students say about me.

(2) I evaluate my teaching by what the administration says about me.

70. (1) I would prefer to be evaluated a few times a term so I know where I stand.

(2) I would prefer to be evaluated only once a term.

B. Course Evaluation

71. (1) The grade I receive in this course is very important to me.

(2) I am not concerned about the grade I receive in this course.

72. (1) If a written exam were given, I would prefer it to be multiple choice.

(2) If a written exam were given, I would prefer it to be essay type.

73. (1) I would like this course to have many short quizzes so I'll know where I stand.

(2) I prefer to have a final exam only.

74. (1) I would like to work on a group project and be evaluated as a group.

(2) I would prefer to work alone and be evaluated on my own work.

75. (1) I would like the projects in this course to be evaluated by my fellow students.

(2) I would like the projects in this course to be evaluated by my instructors.

76. (1) I would like to receive immediate feedback on the project I do for this course.

(2) I can wait until the end of the term to receive my grades on the projects.

77. If I received a C in this course:

(1) I would be very upset and angry and feel that I have been "cheated".

(2) I would be concerned, and make inquires.

78. (1) I would like to write my own exams and answer them.

(2) I would like to take exams written only by the instructors of the course.

79. (1) I would like the instructors of this course to use a norm based system of grading (a grading system based on the bell shaped curve).

(2) I would like the instructors of this course to use criterion referenced system of grading (a grading system based on mastery of objectives).

80. (1) I would like the instructors of the course to tell me what's right or wrong about my course performance.

(2) I would like the intructors of this course to discuss with me how I am performing in the course.

III.

DIRECTIONS: READ EACH STATEMENT CAREFULLY AND DECIDE HOW YOU FEEL ABOUT IT. YOU ARE OFFERED FIVE POSSIBLE ANSWERS TO EACH STATEMENT. PLEASE READ EACH STATEMENT AND RESPOND.

1. SA if you strongly agree with the statement.
2. A if on the whole you would tend to agree.
3. N if you neither agree nor disagree.
4. D if on the whole you would tend to disagree.
5. SD if you strongly disagree with the statement.

		SA	A	N	D	SD
81.	Education should have positive implications for career development.	1	2	3	4	5
82.	The focus of the academic disciplines should be related to the career plans of each student.	1	2	3	4	5
83.	School curricula should be oriented to relate to career development.	1	2	3	4	5
84.	The community is an excellent resource to use in a career education program.	1	2	3	4	5
85.	Education about careers should be integrated into the regular curriculum.	1	2	3	4	5
86.	Occupational role playing can be an effective way for students to learn about careers.	1	2	3	4	5
87.	The world of work should be an organizing center for the curriculum.	1	2	3	4	5
88.	Education should deal with people centered activities.	1	2	3	4	5
89.	Consideration should be given to the views of students in planning and evaluating career education programs	1	2	3	4	5
90.	The schools have the responsibility to help students develop career objectives.	1	2	3	4	5
91.	Students should be knowledgeable about the world of work before leaving school.	1	2	3	4	5
92.	The school curriculum should be related to the career goals of the students.	1	2	3	4	5
93.	The interests of parents should be considered in developing the school curriculum.	1	2	3	4	5

1. SA if you strongly agree with the statement.
2. A if on the whole you would tend to agree.
3. N if you neither agree nor disagree.
4. D if on the whole you would tend to disagree.
5. SD if you strongly disagree with the statement.

		SA	A	N	D	SD
94.	Students presently have sufficient orientation to the possibilities in the world of work to make sound career decisions.	1	2	3	4	5
95.	A career education program should involve real life experiences.	1	2	3	4	5
96.	"Hands on" experiences are essential to a good career education program.	1	2	3	4	5
97.	Teachers are well prepared to teach in career education programs.	1	2	3	4	5
98.	College and university teacher educators do an excellent job in preparing teachers to teach in career education programs.	1	2	3	4	5
99.	For students to make realistic occupational decisions, they should have an opportunity to compare their abilities, interests and needs with the requirements of various types of occupations.	1	2	3	4	5
100.	Students should be aware of the economic system and its implications for employment.	1	2	3	4	5
101.	A major purpose of career education is to help young people discover their individual interests and abilities.	1	2	3	4	5
102.	Commercially developed career oriented games may be considered as resource materials in career education.	1	2	3	4	5
103.	Career education should be concerned with helping each student develop a positive self-image.	1	2	3	4	5
104.	Experiences in career education should allow students to evaluate their interests and abilities.	1	2	3	4	5
105.	Educational systems should be concerned with the placement of some terminating students into entry-level jobs.	1	2	3	4	5
106.	Career education should help students develop positive attitudes toward work.	1	2	3	4	5
107.	It is important to involve parents in planning career education programs.	1	2	3	4	5

1. SA if you strongly agree with the statement.
2. A if on the whole you would tend to agree.
3. N if you neither agree nor disagree.
4. D if on the whole you would tend to disagree.
5. SD if you strongly disagree with the statement.

		SA	A	N	D	SD
108.	Follow-up studies of former students should be an important part of any career education program.	1	2	3	4	5
109.	A career education program should enhance the social skills of the students.	1	2	3	4	5
110.	In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.	1	2	3	4	5
111.	My blood boils whenever a person stubbornly refuses to admit he's wrong.	1	2	3	4	5
112.	There are two kind of people in this world; those who are for the truth and those who are against the truth.	1	2	3	4	5
113.	Most people just don't know what's good for them.	1	2	3	4	5
114.	Of all the different philosophies which exist in this world there is probably only one which is correct.	1	2	3	4	5
115.	The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.	1	2	3	4	5
116.	The main thing in life is for a person to want to do something important.	1	2	3	4	5
117.	I'd like it if I could find someone who would tell me how to solve my personal problems.	1	2	3	4	5
118.	Most of the ideas which get printed nowadays aren't worth the paper they are printed on.	1	2	3	4	5
119.	Man on his own is a helpless and miserable creature.	1	2	3	4	5

1. SA if you strongly agree with the statement.
2. A if on the whole you would tend to agree.
3. N if you neither agree now disagree.
4. D if on the whole you would tend to disagree.
5. SD if you strongly disagree with the statement.

		SA	A	N	D	SD
	120. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.	1	2	3	4	5
IV.	121. Most people just don't give a "damn" for others.	1	2	3	4	5
	122. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.	1	2	3	4	5
	123. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.	1	2	3	4	5
	124. The present is all too often full of unhappiness. It is only the future that counts.	1	2	3	4	5
	125. The United States and Russia have just about nothing in common.	1	2	3	4	5
	126. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.	1	2	3	4	5
	127. While I don't like to admit this even to myself, my secret ambition is to become a great person, like Einstein, or Beethoven, or Margaret Mead.	1	2	3	4	5
	128. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.	1	2	3	4	5
	129. It is better to be a dead hero than to be a live coward.	1	2	3	4	5

Please respond either true or false to each of the following statements. Please leave no statement unanswered.

130. It is hard for me to start a conversation with strangers. 1. True 2. False

131. I must admit that I would find it hard to have for a close friend a person whose manners or appearance made him somewhat repulsive, no matter how brilliant or kind he might be. 1. True 2. False

132. I find that a well-ordered mode of life with regular hours is congenial to my temperment. 1. True 2. False

133. I must admit that it makes me angry when other people interfere with my daily activity. 1. True 2. False

134. I get disgusted with myself when I can't understand some problem in my field, or when I can't seem to make any progress on a research problem. 1. True 2. False

135. I get very tense and anxious when I think other people are disapproving of me. 1. True 2. False

136. I like to talk before groups of people. 1. True 2. False

137. I would certainly enjoy beating a crook at his own game. 1. True 2. False

138. A strong person doesn't show his emotions and feelings. 1. True 2. False

139. When I work on a committee I like to take charge of things. 1. True 2. False

140. It bothers me when something unexpected interrupts my daily routine. 1. True 2. False

141. It is hard for me to act natural when I am with new people. 1. True 2. False

142. It wouldn't make me nervous if any members of my family got into trouble with the law. 1. True 2. False

143. I try to remember good stories to pass them on to other people. 1. True 2. False

144. I usually don't like to talk much unless I am with people I know very well. 1. True 2. False

145. I must admit I try to see what others think before I take a stand. 1. True 2. False

146.	I am embarrassed with people I do not know well.	1. True 2. False
147.	I would be uncomfortable in anything other than fairly conventional dress.	1. True 2. False
148.	I am certainly lacking in self-confidence.	1. True 2. False
149.	I find it hard to set aside a task that I have undertaken even for a short time.	1. True 2. False
150.	I feel nervous if I have to meet a lot of people.	1. True 2. False
151.	Criticism or scolding makes me very uncomfortable.	1. True 2. False
152.	I always follow the rule: business before pleasure.	1. True 2. False
153.	I don't like to undertake any project unless I have a pretty good idea as to how it will turn cut.	1. True 2. False
154.	Most people inwardly dislike putting themselves out to help other people.	1. True 2. False
155.	I usually feel nervous and ill at ease at a formal dance or party.	1. True 2. False
156.	At times I feel that I can make up my mind with unusually great ease.	1. True 2. False
157.	I would like to be an actor on the stage or in the movies.	1. True 2. False
158.	I am very slow in making up my mind.	1. True 2. False
159.	I don't like things to be uncertain and unpredictable.	1. True 2. False
160.	I am a better talker than listener.	1. True 2. False

APPENDIX D

TRAINING MANUAL INSTRUCTIONAL OUTLINE

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INTRODUCTION TO CAREER EDUCATION

SESSION ONE - CONTENT OUTLINE

1. Conditions calling for educational reform

2. Basic concept and programmatic assumptions for career education

3. Definitions and distinctions
   a. Career
   b. Career education
   c. Career development
   d. Vocational education

4. History

5. Current issues
   a. Youth unemployment
   b. School relevance
   c. Back to basics
   d. Transferable skills

INTRODUCTION TO CAREER EDUCATION

SESSION TWO - CONTENT OUTLINE

1. Goals of career education
   a. Preparation for further education
   b. Preparation for work
   c. Life-long skill development

2. Sequential development
   a. Career awareness
   b. Career exploration
   c. Career preparation
   d. Career development counseling

3. Essential components of a career education program
   a. Self-concept and self awareness
   b. Attitudes and values related to work
   c. Occupational information
   d. Process skills
   e. Interdisciplinary education
   f. Experiential education
   g. Development from awareness through preparation
   h. Infusion into the ongoing curriculum

4. Delivery system approaches
   a. Infusion
   b. Units of instruction
   c. Interest centers
   d. Separate courses
   e. Separate program

THE ELEMENTS OF A CAREER EDUCATION PROGRAM

SESSION THREE - CONTENT OUTLINE

1. Identify and define the 8 elements of career education
   a. Self awareness to self identity.
   b. Career awareness to career identity.
   c. Appreciations/attitudes to self/social fulfillment.
   d. Educational awareness to educational identity.
   e. Economic awareness to economic understandings.
   f. Decision-making to career decisions.
   g. Beginning competency to employability skills.
   h. Employability skills to career placement.
2. Analyze activities for presence of elements.
3. Conceptualize the infusion process.
   a. One or more of the 8 elements.
   b. Blended into ongoing curriculum.
   c. Naturalness of the relationship.
   d. Process more than content.
4. Presentation of Super's "10 Elements of a Theory of Vocational Development."
5. Presentation of the 15 occupational clusters.

MAPPING CAREER EDUCATION TO THE SCHOOL CURRICULUM

SESSION FOUR - CONTENT OUTLINE

1. School Curriculum
   a. Knowledge
   b. Skills
   c. Attitudes

2. Eight Elements of Career Education
   a. Self Awareness
   b. Educational Awareness
   c. Career Awareness
   d. Economic Understanding
   e. Beginning Competencies
   f. Employability Skills
   g. Attitudes and Appreciations
   h. Decision-Making

INFUSING CAREER AWARENESS INTO THE SCHOOL CURRICULUM

SESSIONS FIVE AND SIX - CONTENT OUTLINE

I. Guidelines for Developing Infusion Activities

- a. multiple elements
- b. natural outgrowth of educational objective
- c. experiential
- d. contemporary in focus
- e. resources needed

II. Components of Career Education Infusion Activities

- a. objectives
- b. activities
- c. resources
- d. evaluation
- e. other specifications - see handout

III. Formatting Concerns for Infusion Activities

- a. readability
- b. illustrations
- c. packaging
- d. sequencing
- e. time frames
- f. audience
- g. other specifications - see handout

ROLE PLAYING TECHNIQUES IN CAREER EDUCATION

SESSION SEVEN - CONTENT OUTLINE

1. Role Playing:
   a. The use of role playing.
   b. The educational value of role playing.
   c. The steps in conducting a role playing activity.
2. Guidelines in writing role playing activities.
3. Practice in writing role playing activities.

DEVELOPING CAREER EDUCATION INTEREST CENTERS

SESSION EIGHT-CONTENT OUTLINE

1. Learning Activity Center
   a. Definition
   b. Advantages

2. Four goals for the development of career education activity centers
   a. to reinforce academic content learning
   b. to develop the eight career education elements
   c. to develop transferable skills
   d. to provide career exploratory experiences

3. Guidelines for development and use of learning activity centers
   a. planning
   b. designing
   c. procedures for utilization

USING COMMUNITY RESOURCES FOR CAREER EDUCATION
SESSION NINE - CONTENT OUTLINE

1. Community resources include:
   a. Human resources
   b. Print materials
   c. Non-print materials
   d. Institutional resources

2. Community resource approaches include:
   a. Speakers bureau
   b. Mini-courses
   c. Resource center
   d. Field trips
   e. Interview file
   f. Shadowing programs
   g. Internships

3. Program descriptions include:
   a. Qualifications for participation
   b. Activities
   c. Objectives
   d. Scheduling procedures
   e. Management procedures
   f. Roles and responsibilities
   g. Planning
   h. Resources required
   i. Program evaluation
   j. Learning assessment

DEVELOPING AN INSTRUCTIONAL UNIT FOR CAREER EDUCATION

SESSIONS TEN AND ELEVEN - CONTENT OUTLINE

1. Analyzing a career education instructional unit
   a. Components
   b. Strengths
   c. Weaknesses
2. Assessing career education instructional units
   a. Broad concept or theme
   b. Length
   c. Components of each activity
   d. Elements interwoven
   e. Culminating experience
   f. Particular features
3. Guidelines for infusing career education into instructional units
   a. Broad concept or theme
   b. Length
   c. Objectives
   d. Culminating experience
   e. Experiential
   f. Infusion
   g. Goals accomplished
   h. Mapping activities to objectives
   i. Evaluation plan

EVALUATION CAREER EDUCATION MATERIALS

SESSIONS TWELVE AND THIRTEEN - CONTENT OUTLINE

1. Evaluation Format
   a. Components
   b. Format

2. Instructional Materials Analysis
   a. Cover sheet
   b. Internal characteristics
   c. External characteristics
   d. Summary statement

ROLES AND FUNCTIONS OF SCHOOL PERSONNEL IN CAREER EDUCATION

SESSION FOURTEEN - CONTENT OUTLINE

1. Problems associated with planning and implementing career education:
   a. personnel issues
   b. philosophical issues
   c. programmatic issues
   d. fiscal issues
   e. logistical issues
   f. scheduling issues
   g. authority/control/responsibility issues
   h. community involvement issues
2. Identification and clarification of roles and functions:
   a. board members
   b. system-wide administration
   c. building level administration
   d. teachers
   e. business representatives
   f. parents
   g. students

APPENDIX E

FORMATIVE EVALUATION INSTRUMENTATION

FORMATIVE ASSESSMENT

PARTICIPANT SESSION REACTION FORM

Circle the one word that most clearly describes your feeling about this session.

1. amused
2. angry
3. annoyed
4. anticipatory
5. apprehensive
6. bored
7. calm
8. complacent
9. concerned
10. content
11. depressed
12. despairing
13. detached
14. disappointed
15. disturbed
16. ecstatic
17. elated
18. exasperated
19. excited
20. glad
21. helpless
22. indifferent
23. indignant
24. inquisitive
25. interested
26. involved
27. joyful
28. liberated
29. lonely
30. meditative
31. neutral
32. satisfied
33. serene
34. somber
35. still
36. terrified
37. tranquil
38. uneasy

SCALE FOR PARTICIPANT SESSION REACTION FORM

Adj. No.	Involvement[1]	Satisfaction[1]	Adj. No.	Involvement[1]	Satisfaction[1]
1	6	7	20	7	7
2	9	1	21	3	1
3	7	3	22	1	3
4	8	6	23	9	2
5	7	2	24	7	6
6	0	3	25	6	6
7	4	6	26	9	7
8	2	4	27	9	9
9	6	4	28	2	9
10	4	6	29	2	1
11	1	1	30	2	6
12	9	0	31	5	5
13	1	4	32	6	7
14	6	2	33	2	8
15	6	2	34	3	2
16	10	10	35	1	6
17	10	9	36	10	0
18	8	2	37	3	7
19	8	8	38	4	3

[1]For purposes of this evaluation, the elation-depression dimension (Willis and Allen, 1978:52-58) was treated as a satisfaction-dissatisfaction dimension, while the involvement-uninvolvement dimension was retained. (Reference - Willis, George (Editor) Qualification Evaluation: Concepts and Cases in Curriculum Criticism. Berkeley: McCutchan Publishing Corporation, 1978.)

GENERIC FORMATIVE ASSESSMENT

INSTRUCTOR ASSESSMENT FORM

Name _____ Location _____

Session Date _____ Session Title _____

Time _____ No. of Students _____ Structure (High or Low) _____

VD Very Dissatisfied D Dissatisfied
N Neutral G Good
E Excellent

1. What was your general reaction to this session? VD D N G E

2. What do you think was the student's general reaction to this session? VD D N G E

VP Very Poorly P Poorly
A Adequately W Well
EW Extraordinarily Well

3. How well did the instructional guide and resources provide what you needed for the session? VP P A W EW

   A. How well did the directions provide the information you needed? VP P A W EW

   B. How adequately did the resources provide the information needed? VP P A W EW

   C. Were the time allocations appropriate? VP P A W EW

   D. How well did the session flow from activity to activity? VP P A W EW

   E. Did the activity provide for appropriate student participation? VP P A W EW

   F. How well did the activities contribute to the achievement of the session objectives? VP P A W EW

   G. How well were the course session objectives achieved? VP P A W EW

4. Specific suggestions or recommendations for improving this session.

_____

_____

SAMPLE

Session 4 - 6 pm/7 - 9 pm

Instructor _____

Date _____

CAREER EDUCATION: AN INTRODUCTION - PART 2

TEACHING ANALYSIS GUIDE

HIGH STRUCTURE

Phase One	Adequate	Minimal	Not at all	Not Necessary
1. Did the teacher distribute the transferable skills handout to each student?	_____	_____	_____	_____
2. Did the teacher lead a discussion of the meaning of transferable skills?	_____	_____	_____	_____
3. Did the teacher clarify meanings?	_____	_____	_____	_____
Phase Two				
4. Did the teacher distribute the "Life Planning Laboratory" handout?	_____	_____	_____	_____
5. Did the students complete activity II - their self-description?	_____	_____	_____	_____
6. Did the teacher have each person share their activity II with the group?	_____	_____	_____	_____
7. Did others give students feedback?	_____	_____	_____	_____
Phase Three				
8. Did the teacher lead and coordinate a discussion of the relationships between the self-descriptions and the transferable skills handouts?	_____	_____	_____	_____
9. Did the teacher get individual students to discuss their transferable skills?	_____	_____	_____	_____
Phase Four				
10. Did the students complete the "What Can I Do" activity sheet?	_____	_____	_____	_____
11. Did the teacher guide a discussion of the "What Can I Do" situation?	_____	_____	_____	_____
12. Did the teacher encourage individual student reactions?	_____	_____	_____	_____
Phase Five				
13. Did the teacher lead a discussion of the need for schools to address the issue of transferable skills and career development?	_____	_____	_____	_____

SAMPLE

Session 4 - 6 pm/7 - 9 pm

Instructor _____

Date _____

CAREER EDUCATION: AN INTRODUCTION - PART - 2

TEACHING ANALYSIS GUIDE

LOW STRUCTURE

Phase One	Adequate	Minimal	Not at all	Not Necessary
1. Did the teacher negotiate the arrangements for small working groups?	_____	_____	_____	_____
2. Did the teacher distribute the handouts and request that students relate the transferable skills to their personal experiences?	_____	_____	_____	_____
3. Did the students conduct small group discussion on these topics?	_____	_____	_____	_____
Phase Two				
4. Did the students write a brief anecdote about an experience that they had that made them proud?	_____	_____	_____	_____
5. Did students relate their experiences to the group?	_____	_____	_____	_____
6. Did the group analyze the anecdote in terms of transferable skills?	_____	_____	_____	_____
Phase Three				
7. Did each member of the small groups complete the "What Can I Do" activity?	_____	_____	_____	_____
8. Were students able to share the personal information from their activity sheets?	_____	_____	_____	_____
9. Were the teacher and students able to extend their discussion to school issues related to transferable skills and career development?	_____	_____	_____	_____

SAMPLE

Session: 4-6 pm / 7-9 pm

Instructor: _____

Date: _____

ROLE PLAYING TECHNIQUES IN CAREER EDUCATION

LOW STRUCTURE

TEACHING ANALYSIS GUIDE

Phase One	Yes	To Some Extent	No	Not Applicable
1. Did the teacher distribute the role playing handouts to members of the group?	____	____	____	____
2. Did the teacher direct their attention to the use of role playing, the educational value, and the steps in role playing activities?	____	____	____	____
3. Did the group read the materials?	____	____	____	____
Phase Two				
4. Did the teacher form 3-4 small groups?	____	____	____	____
5. Did the small groups conduct independent role playing sessions using the activity cards?	____	____	____	____
6. Did the small groups discuss their experiences?	____	____	____	____
Phase Three				
7. Did the groups design and write a career education related role playing activity?	____	____	____	____
8. Did the groups share their activity with other groups?	____	____	____	____

SAMPLE

Session: 4-6 pm / 7-9 pm

Instructor: _____

Date: _____

ROLE PLAYING TECHNIQUES IN CAREER EDUCATION

HIGH STRUCTURE

TEACHING ANALYSIS GUIDE

Phase One	Yes	To Some Extent	No	Not Applicable
1. Did the teacher discuss with the class the following:				
a) Use of role playing activity?	____	____	____	____
b) Step in role playing?	____	____	____	____
c) The educational value of role playing?	____	____	____	____
2. Were the role playing handouts used as references for details on role playing and specific examples of applications to career education?	____	____	____	____
Phase Two				
3. Did the teacher guide the students through the following role playing activities?				
Role Play I -- Self Awareness	____	____	____	____
Role Play II -- Attitudes, Appreciation, and Decision-Making	____	____	____	____
Role Play III -- Career Awareness	____	____	____	____
Role Play IV -- Employable Skills	____	____	____	____
Role Play V -- Economic Awareness	____	____	____	____
4. Did the teacher guide the group in a discussion of the value of each activity?	____	____	____	____
Phase Three				
5. Did each student design a role playing activity?	____	____	____	____
6. Did the group share their activities?	____	____	____	____

APPENDIX F

AGENDA FOR THE ORIENTATION SESSION FOR THE FIELD-SITE INSTRUCTORS

PROJECT FOCUS

Trainer's Session 1/5/79

AGENDA

I. Welcome

II. General Orientation

A. Review of Project Goals

1. Produce training manuals
2. Train 80 participants
3. Research component
4. Dissemination

B. Review Research Design Components

1. Participant pretest

a. Cognitive knowledge of career education
b. Affects toward career education
c. Personal orientation toward change and receptivity

2. Formative assessment

a. Student weekly adjective check sheet
b. Instructor weekly session reaction form

3. Participant post-test

a. Cognitive knowledge of career education
b. Affects toward career education

C. High and Low Structure

1. Components of structure
2. Application in training program - grouping and instruction

III. Student Orientation - 1/10/79

A. Registration

1. Materials
2. Procedures - forms, firmness

B. Texts

1. Distribution
2. Collection of funds

C. Pretesting

1. Code names on sheets - use social security number
2. Use of opscan sheets and pencils
3. Administer all tests except take-home questionnaire

D. Introduce Course - Session Plan

E. Complete Management Component

1. Check registration forms, registration fees, text fees, and pre-tests
2. Call Frank Farinella to verify student list
3. Other concerns

IV. The Training Program

A. Components in the Trainer's Package

1. Session-by-session instructional outline
2. Resources - handouts and transparencies
3. Instructional tape guidelines
4. Formative assessment - student and instructor

B. Process

1. High-low structure
2. Introduce session
3. Conduct activities
4. Student and instructor formative assessment
5. Homework assignments

C. Review of the Pre-Test/Orientation Sessions

1. & 2. An Introduction to Career Education
3. Eight Elements of Career Education
4. Mapping the School Curriculum to Career Education
5. & 6. Infusing Career Education into Academic Subjects
7. Role Playing Techniques in Career Education
8. Developing Career Education Activity Centers
9. Using Community Resources for Career Education
10. & 11. Designing an Instructional Career Education Unit
12. & 13. Evaluating Career Education Materials
14. Roles and Functions of School Personnel in Career Education
15. Student and Course Assessment

V. Other Components

A. Instructor payment
B. Physical facilities - at location and at Boston University
C. Use of substitutes
D. On-site xeroxing
E. Communications with B.U. - on-site visitations/clarifications/concerns
F. Formative Assessment Mailing Procedures
G. Items yet to be provided to the instructors
H. Questions and answers

APPENDIX G

PROMOTIONAL FLYER FOR PROJECT FOCUS FIELD-SITE TRAINING COMPONENT

Boston University School of Education
Department of Business and Career Education
765 Commonwealth Avenue
Boston, MA 02215

PROJECT FOCUS

A Career Awareness Training Program

SPONSORED BY: BOSTON UNIVERSITY, SCHOOL OF EDUCATION
Supported by a Career Education Grant from
United States Office of Education, Department of Health, Education & Welfare

ABSTRACT: Project FOCUS is based upon the assumption that career education should be infused into school programs by all professional educators. The project will provide on-site training to selected educators (K to 8) and will offer four (4) graduate credits through Boston University, School of Education. Concomitant to the training, a set of replicable training manuals will be developed for application in career education staff development programs by school systems, universities, and state departments of education.

The on-site graduate course (Career Education Implementation and Practice BC 701X) will focus directly on Ideology, Curriculum, Instruction, and Management Techniques related to the infusion of career education into school programs by classroom teachers. Eighty participants will be selected from applicants at four pre-selected sites. Participation will be limited to personnel involved at the kindergarten through grade eight levels and will be restricted to twenty educators at each site.

COURSE DETAIL:
- BC 701X Career Education Implementation and Practice is a four (4) credit graduate course.
- The course will meet one day per week in two (2) sections (Wed. 4:00 to 6:00 p.m. or Wed. 7:00 to 9:00 p.m.) at four selected local school sites.
- Each section will accommodate ten (10) participants.
- The course will be scheduled for fifteen (15) weeks from January 17, 1979 to May 9, 1979.
- Cost: Tuition costs are waived by virtue of a grant from USOE, Office of Career Education. Participants will be assessed only the nominal $20.00 registration fee, and the cost of any texts required for the course.

PROJECT FOCUS COURSE APPLICATION FORM

If interested, please complete and return this form to your local representative (see below).

NAME _____

SCHOOL SYSTEM _____ SCHOOL _____

GRADE LEVEL TEACHING _____ POSITION: TEACHER ____ OTHER (SPECIFY) _____

HOME ADDRESS _____

SCHOOL ADDRESS _____

HOME PHONE _____ SCHOOL PHONE _____

COURSE SECTION PREFERENCE _____ 4-6 p.m. _____ 7-9 p.m.

Barnstable	Boston	Brookline	Stoughton
Ms. Patricia Duffy	Ms. Joanne Russell	Mr. Joseph Tarantino	Dr. Guy Tardanico
Dir.-Project BICEP	District I Office	Supervisor of	Admin. Assist. to
Barnstable HS	Brighton	Industrial Arts	the Superintendent

Boston University admits students regardless of their race, color, national origin, religion, sex, age, handicap, and veteran status to all its programs and activities. A copy of the University's complete policy on discrimination is printed in the University catalogue and may be obtained from the Affirmative Action Officer, 881 Commonwealth Avenue, Boston, MA 02215 (617/353-4478).

SED 18

APPENDIX H

LETTERS OF RESPONSE TO TRAINING COMPONENT APPLICANTS

LETTER OF ACCEPTANCE

INFORMED CONSENT FORM

Boston University

School of Education
765 Commonwealth Avenue
Boston, Massachusetts 02215

Department of Business and Career Education

Dear

You have been selected to participate in the four (4) semester hour, semester II graduate course BC701X Career Education Implementation and Practice offered by the Boston University School of Education through Project FOCUS. As stipulated, tuition will be paid through Project funds. The only expense you will incur is the $20.00 registration fee and the cost of your text. The registration fee should be in the form of a check made payable to Boston University and will be collected during the first class session, Wednesday January 10, 1979.

You have been assigned to section which will meet each Wednesday at P.M. in a District I school to be announced later. Doctor Lawrence W. Aronstein, Principal, Memorial Elementary School, Millis, Massachusetts and formerly Career Education Coordinator, Rockland County, New York, will serve as the course instructor.

Project FOCUS has a dual set of objectives. Career education training will be offered to eighty educators at four sites, using a set of training manuals developed through this federally funded grant. These manuals have been designed for use by universities, school systems, and state departments of education.

A unique aspect of these manuals, and also of the inservice training course, will be its attempt to offer alternative models of presentation matched to the learning styles of participants.

It will be necessary in the development of these manuals to elicit evaluative data from the inservice participants. This information will be used to answer the research question: who should receive high or low structured programs, based upon the individual participant's orientation toward career education.

During the semester, feedback mechanisms will be implemented to determine whether or not the instructional formats being utilized are effective.

The information collected will be coded to insure each participant's confidentiality. Individual class member responses will not be presented to anyone. Only group data will be shown.

In addition, any participant may withdraw consent and discontinue participation at any time, or may feel free to deny answers to any specific items or questions presented. These actions may be taken without concern or apprehension of any kind.

Recent directives of the United States Department of Health, Education and Welfare and the Boston University School of Education Research Review Committee require that participants in evaluative research projects be apprised of the intent of the evaluative components of the project and freely give consent to participate.

You are requested to indicate your intent to participate in Project FOCUS and to attend the course Career Education Implementation and Practice by signing and dating the enclosure and returning it to Boston University using the return envelope provided.

Should you have further questions about the procedures or other aspects of Project FOCUS, please call Mr. Frank Farinella, Project Manager, at Boston University, 353-3216.

Thank you very much. We look forward to working with you in this project.

Sincerely yours,

Robert R. Gower
RRG

Harold S. Resnick
H.S.R.

Robert R. Gower, Ed.D
Associate Professor
Project Co-Director
School of Education

Harold S. Resnick, Ed.D
Associate Professor
Project Co-Director
School of Education

TO: Boston University School of Education
Department of Business/Career Education

ATTN: Mr. Frank Farinella, Prcject Manager
Project FOCUS

☐ I have read the description of the field site component of Project FOCUS and will participate in the second semester course: Career Education Implementation and Practice.

Participant Signature: _____

Date: _____

School/Community: _____

☐ I will not participate in the second semester course: Career Education Implementation and Practice.

Participant Signature: _____

Date: _____

School/Community: _____

LETTER OF REGRET

Boston University

School of Education
765 Commonwealth Avenue
Boston, Massachusetts 02215

Department of Business and Career Education

December 8, 1978

Dear

Thank you for your interest and application for participation in the Project FOCUS elementary school career education staff development program. We were most pleased with the number of extremely qualified individuals who applied for participation.

There are a total of eighty positions available, divided equally among the school systems of Boston, Barnstable, Brookline, and Stoughton. Each school system, therefore, received an allocation of twenty seats. The allocation in Boston was assigned to District 1, due to its long term paring relationship with the Boston University School of Education. We agreed that, should additional seats be available, faculty from District 9 might be included as well.

We regret to inform you that as of this time the twenty positions allocated to Boston have all been filled by faculty in District 1. This decision was an administrative one, relating to the organization of the program. It had no bearing at all on the qualifications of any individual applicants. Regretably, therefore, we will not be able to offer one of these positions to you.

If, for some reason, individuals should choose not to participate and space becomes available, we will contact you regarding the possibility of joining the program at that time.

Thank you for your interest in Project FOCUS.

Sincerely yours,

Robert R. Gower
jw

Harold S. Resnick
F.F.

Robert R. Gower, Ed.D
Associate Professor
Project Co-Director
School of Education

Harold S. Resnick, Ed.D
Associate Professor
Project Co-Director
School of Education

jw

APPENDIX I

THE PROMOTIONAL BROCHURE

Project FOCUS

A Project for Training Educational Personnel in Career Education

Career Education Program

Division of Continuing Education
and Special Programs

Boston University School of Education
Boston, Massachusetts 02215

Project Description

Project FOCUS (Program Methods and Materials for Training Career Educators) was a one-year funded project conducted by Career Education Program faculty and staff of the School of Education at Boston University. The project was sponsored through a Career Education grant, U.S. Office of Education, U.S. Department of Health, Education, and Welfare, from the period September 1, 1978, through August 31, 1979 (Grant #G0078C0021).

Based on the theoretical tenet that career education should be infused into school programs by professional educators, the Project FOCUS team developed a comprehensive training manual for the preparation of pre-service and in-service educational personnel to implement career education in school settings. This manual was field-tested through a training program with in-service elementary school personnel at urban, suburban, and rural sites.

The field test revealed that the staff development program, as presented through the training manual, increased the participants' knowledge about, as well as improved their attitudes toward, career education.

Further research was conducted to establish each teacher's level of receptivity toward career education at the start of the training program, and to match differing levels of receptivity toward various models of teaching in the training program itself. The complete results of this aspect of the research are included in the theory and research volume of the final report.

A description of this project, the training manual, and the research design and results have been compiled in three separate volumes. Each of these volumes is described in greater detail in this brochure. Procedures for obtaining copies of these reports are included as well.

Project FOCUS Staff

Dr. Harold S. Resnick
Associate Professor
Project Co-Director

Dr. Robert R. Gower
Associate Professor
Project Co-Director

Mr. Frank C. Farinella
Project Manager

Boston University
School of Education
Boston, MA 02215

Program Methods and Materials for Training Career Educators
VOLUME I — PROJECT DESCRIPTION

Volume I includes an overview of the organizational and developmental activities of Project FOCUS. This document provides valuable information for those who are managing similar programs or who anticipate conducting such an effort.

I. **General Overview**
   - A. Origins of the Program
   - B. Program Management and Organization
   - C. Program Objectives, Activities, and Outcomes

II. **The Staff Development Manual**
   - A. Design of the Training Program
   - B. Development of the Training Program
   - C. Field Test Procedures
   - D. Revision of the Manual

III. **Evaluation Procedures and Results**
   - A. Participant and Instructor Reactions to the Training Program (Process)
   - B. Effectiveness of the Training Program (Product)
   - C. General Usability of the Training Manual

IV. **Dissemination Efforts**
   - A. Products Available
   - B. Dissemination Procedures Employed

Program Methods and Materials for Training Career Educators
VOLUME II — THE TRAINING MANUAL

This volume contains the revised Training Manual, with an introductory chapter. Also included is a separate final chapter addressing the evaluation of the program and the participants.

The chapters of this manual each represent one or two sessions of the training program. Each chapter contains three major components. The first of these is an introduction to the training session, with general information and guidelines regarding the manner in which the session should be conducted. The next section of each chapter contains specific instructional guidelines, with step-by-step procedures and content outlines to follow in conducting the training activities. The final section provides all the resources necessary — transparency masters and handouts — for use both by the trainer and the participants for the successful completion of the session.

Following is a list of the chapters of this training manual, and the sessions of the training program that are represented in each chapter.

Chapter	Title	Sessions
I.	Organization of the Training Manual	(Introduction)
II.	Introduction to Career Education	1 and 2
III.	The Elements of a Career Education Program	3
IV.	Mapping Career Education to the School Curriculum	4
V.	Infusing Career Awareness into the School Curriculum (Writing Infusion Activities)	5 and 6
VI.	Role Playing: An Example of an Instructional Activity	7
VII.	Interest Centers for Career Awareness	8
VIII.	Using Community Resources for Career Education	9
IX.	Developing an Instructional Unit for Career Education	10 and 11
X.	Evaluating Career Education Materials	12 and 13
XI.	Roles and Functions of School Personnel in Career Education	14
XII.	Program Evaluation and Student Assessment (Including pre- and post-tests and formative assessment instruments)	15

Program Methods and Materials for Training Career Educators
VOLUME III — THEORY AND RESEARCH: EVALUATION RESULTS

This volume describes the theoretical underpinnings for the research component of the project. It includes all instrumentation, methodology, findings, conclusions, and implications for career education staff development.

I. **Introduction**

II. **Theory and Methodology**
   - A. Purpose of the Study
   - B. Rationale for a Differentiated In-Service Model
   - C. The Theoretical Model
   - D. The Research Design

III. **Summative Evaluation of the Training Program**
   - A. Introduction
   - B. Evaluation Design
   - C. The Cognitive Instrument
   - D. The Affective Instrument
   - E. Data Analysis
   - F. Conclusions

IV. **Formative Evaluation of the Training Program**
   - A. Purpose
   - B. Instruments and Procedures
   - C. Data Collection
   - D. Findings
   - E. Summary and Conclusions

V. **Synthesis**

SED H9

Project FOCUS
Career Education Program
Division of Continuing Education and Special Programs
Boston University School of Education
704 Commonwealth Avenue
Boston, MA 02215

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Volume III	Theory and Research: Evaluation Results	_____ Copies	@ 12.00	_____
			Total	$ _____

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